Advance Program

IEEE FiCloud 2016

The IEEE 4th International Conference on Future Internet of Things and Cloud

MobiWis 2016

The 13th International Conference on Mobile Web and Intelligent Information Systems

Lecture Notes in Computer Science (LNCS), Springer

OBD 2016

The 2nd International Conference on Open and Big Data

IEEE-CS TCI

Co-located Symposia/Workshops:

ICI, BigDataR&I, MobiApps, PMECT, SNAMS, EMSICC, SITA, ABA, AWMA

22-24 August 2016
Vienna, Austria

With Support of: University of Vienna, Austria

KEYNOTE TALK I

The IPv6-based IoT and Cloud Computing Enabling Advanced Innovations for Vibrant Ecosystems

Latif LADID

University of Luxembourg
Luxembourg

Abstract:
The public IPv4 address space managed by IANA (http://www.iana.org) has been completely depleted by Feb 1st, 2011. This creates by itself a critical challenge when adding new things and enabling new services on the Internet. Without publicly routable IP addressing, the Internet of Things and anything that's part of Internet of Everything would be greatly reduced in its capabilities and limit its potential success. Most discussions about IoT have been based on the illusionary assumption that the IP address space is an unlimited resource or it's even taken for granted that IP is like oxygen produced for free by nature. The adoption of IPv6 provide enhanced features that were not tightly designed or scalable in IPv4 like autoconfig, IP mobility, ad hoc services; etc catering for the extreme scenario where IP becomes a commodity service enabling lowest cost networking deployment of large scale sensor networks, RFID, IP in the car, to any imaginable scenario where networking adds value to commodity. IPv6 deployment is now in full swing with some countries achieving over 50% penetration such as Belgium or the US with some 75 M users powered by IPv6 without even the users knowing it. Recently, Apple has required its apps developers to use IPv6 only for their apps staring June 1, 2016 which gives a great shot in the arm of IPv6. There are many inflections points happening this decade to influence the design of first tangible IoT, 5G and Smart Cities. It will be a combination of IoT, SDN-NFV, Cloud Computing, Edge Computing, Big IoT Data and 5G to shift through to realising the paradigm shift from current research-based work to advanced IoT, 5G and Smart Cities. This talk will be devoted to analyze the transformative industrial and societal impact of IPv6 on the potential mix of IPv6-based IoT, SDN-NFV, Cloud Computing, Big Data and 5G and its advanced features, highlighting the challenges and solutions moving forward.

Biography:
Prof. Latif Ladid is the Founder & President of the IPv6 FORUM (www.ipv6forum.org) and the Founding Chair of the 5G World Alliance (http://www.5gworldalliance.org/). He is the Chair of the ETSI IPv6 Industry Specification Group (https://portal.etsi.org/tb.aspx?tbid=827&SubTB=827) and the Chair of the IEEE ComSoC IoT sub-committee. Prof Ladid is the Chair of the IEEE ComSoC 5G sub-committee the Vice Chair of the IEEE ComSoC SDN-NFV sub-committee. He is the Emeritus Trustee of the Internet Society - ISOC (www.isoc.org), IPv6 Ready & Enabled Logos Program Board (www.ipv6ready.org), World summit Award Board Member (www.wsis-award.org) and the Research Fellow at University of Luxembourg on multiple European Commission Next Generation Technologies IST Projects. He is also a member of 3GPP PCG Board (www.3gpp.org), 3GPP2 PCG (www.3gpp2.org), UN Strategy Council, and the Future Internet Forum EU Member States (representing Luxembourg).

KEYNOTE TALK II

Intelligent Systems for Healthy Cities

Agnis Stibe

MIT Media Lab
Massachusetts Institute of Technology, USA

Abstract:

Quality of life in cities can be improved through reshaping and advancing urban spaces with persuasive mobile and socially influencing strategies, thus empowering communities to succeed in achieving sustainable wellbeing. This vision aims at helping people to acquire healthy and sustainable everyday routines through intelligent urban interventions that facilitate health behavior change at scale. Ultimately, this research seeks to create socially engaging environments supporting wellbeing and innovation through reshaping behavioral patterns, intelligent outdoor sensing, interactive public feedback channels, designing responsive neighborhoods, and fostering adoption of novel experiences in future cities.

Biography:

Dr. Agnis Stibe is a social engineer at the MIT Media Lab. In his recent TEDx talk, Dr. Stibe envisions future persuasive cities that encourage healthy and sustainable routines. His research is built upon socio-psychological theories to design Socially Influencing Systems (SIS) for health behavior change at scale. Dr. Stibe frequently speaks at conferences and effectively collaborates with industry. He has worked for a number of multinational companies, including Hewlett-Packard, Oracle, and First Data. Dr. Stibe has twice been recognized from the Minister of Education and Science for his long-term creative work. He holds a master's degree in computer science, an MBA, and a PhD on SIS.

MONDAY 22 AUGUST 2016

08:00 AM: Registration

9:00-9:30   Conference Opening (Room: Edison)

09:30-10:30	Plenary Session: Keynote I

The IPv6-based IoT and Cloud Computing Enabling Advanced Innovations for Vibrant Ecosystems
   Latif LADID, University of Luxembourg
Session Chair: Michel Kadoch, ETS, Canada
Room: Edison

10:30-11:00	Coffee Break

11:00-12:30	Parallel Sessions

FiCloud Session 1: Software Architecture and Middleware
Session Chair: Said Tazi, LAAS, CNRS, France
Room: Edison

CacheL-A Cache Algorithm using Leases for Node Data in the Internet of Things
   David Tracey and Cormac Sreenan
Building Models of Installations to Recommend Applications in IoT Software Ecosystems
   Matúš Tomlein and Kaj Grønbæk
A Disruption-Tolerant RESTful Support for the Web of Things
   Nicolas Le Sommer, Lionel Touseau, Yves Mahéo, Maël Auzias and Frédéric Raimbault
A Metric to Estimate Resource Use in Cloud-based Videoconferencing Distributed Systems
   Alvaro Alonso, Ignacio Aguado, Joaquín Salvachúa Rodríguez and Pedro Rodriguez Perez
Negotiation based scheduling for an efficient SaaS provisioning in the Cloud
   Aya Omezzine, Bellamine Ben Saoud Narjes, Said Tazi and Gene Cooperman

FiCloud Session 2: Cloud and Network Services
Session Chair: Natalia Kryvinska, University of Vienna
Room: Watt

Building Media-Rich Cloud Services from Network-Attached I/O Devices
   Ilija Hadzic, Martin D. Carroll, Michael J. Coss and Hans C. Woithe

Exploiting Virtualization and Sporadic Clouds for collaborative downloading in VANETs - A new Networking as a Service
  Esteban Ordóñez, Jack Bravo, Yolanda Blanco, Martín López, Víctor Saiáns and José Pazos
Supersensors: Raspberry Pi Devices for Smart Campus Infrastructure
  Kristian Hentschel, Dejice Jacob and Jeremy Singer
Pricing Ontology for Task-Oriented Cloud Sourcing
  Richard Greenwell, Xiaodong Liu and Kevin Chalmers
Shaping decision-making on Cloud Services application in business processes
  Nikita Konovalov and Nikolay Kazantsev

MobiWis Session 1: Mobile Web - Practice and Experience

Session Chair: Thanh Van Do, Telenor Research and Norwegian University of Science & Technology
Room: Tesla

An Android Kernel Extension to Save Energy Resources without Impacting User Experience
  Luis Corral, Ilenia Fronza, Nabil El Ioini, Andrea Janes, and Peter Plant
Mobile Soundscape Mixer – Ready for Action
  Kari Salo, Merja Bauters and Tommi Mikkonen
Onde Chiare: A Mobile Application to Mitigate the Risk Perception from Electromagnetic Fields
  Katiuscia Mannaro and Marco Ortu
Ringtone Adaptation Based on Location and Surrounding Noise
  Petr Mervart, Jan Dvorak, Ondrej Krejcar
Loop speed trap data collection method for an accurate short-term traffic flow forecasting
  Sahraoui Abdelatif, Derdour Makhlouf, Philippe Roose and Bektache Djamel

12:30-13:30	Lunch

13:30-15:00	Parallel Sessions

FiCloud Session 3: Security and Privacy I

Session Chair: Indrakshi Ray, Colorado State University
Room: Edison

Private Aggregation Scheme based on Erasable Data-hiding in Wireless Sensor Networks
  Weini Zeng, Peng Chen, Yeqing Yi and Jianzhong Zhou
Survey of Intrusion Detection Systems towards an End to End Secure Internet of Things
  Audrey Gendreau and Michael Moorman

Detection of Malicious Portable Executables using Evidence Combinational Theory with Fuzzy Hashing
  Anitta Patience Namanya, Qublai Khan Ali Mirza, Hamad Al-Mohannadi, Irfan Awan and Jules Ferdinand Pagna Disso
Practical and Secure IoT Device Authentication using Physical Unclonable Functions
  John Ross Wallrabenstein
A Quorum RFID System Using Threshold
  Ayad Al-Adhami, Marcel Ambroze, Colin Cristopher, Ingo Stengel and Martin Tomlinson

MobiWis Session 2: Advanced Web and Mobile Systems

Session Chair: Tor-Morten Grønli, Westerdals Oslo ACT
Room: Tesla

Computational Thinking through Mobile Programming: A Case Study in a Liberal Education Context
  Ilenia Fronza, Nabil El Ioini and Luis Corral
Realistic Offloading Scheme for Mobile Cloud Computing
  Hamid Jadad, Abderezak Touzene, Nasser Al-Zeidi, Khaled Day and Bassel Arafeh
Model Driven Development Approaches for Mobile Applications: A Survey
  Eric Umuhoza and Marco Brambilla
Fuzzy Ontology Based Model for Image Retrieval
  Madiha Liaqat, Sharifullah Khan and Muhammad Majid
Face-Based Difficulty Adjustment for the Game Five in a Row
  Jan Novotny, Jan Dvorak, Ondrej Krejcar

SNAM Session 1: Social Media 1

Session Chair: Rehab Duwairi, Jordan University of Science and Technology
Room: Watt

Human Acceptance of Autonomous Social Media Agent
  Hafiza Basserat Fatima, Syed Waqar Ul Qounain Jaffry, Mian Mubasher and Muhammad Anas Khan Sherwani
Towards Automatic Persona Generation Using Social Media
  Jisun An, Ho Youn Cho, Haewoon Kwak, Mohammed Ziyaad Hassen and Bernard Jansen
AffinityFinder: A System for Deriving Hidden Affinity Relationships on Twitter Utilizing Sentiment Analysis
  Abdelmounaam Rezgui, Daniel Fahey and Ian Smith
Correlation of weather and moods of the Italy residents trough an analysis of their tweets
  Gianfranco Modoni and Davide Tosi

| 15:00-15:30 | Coffee Break |

| 15:30-17:00 | Parallel Sessions |

FiCloud Session 4: Security and Privacy II

Session Chair: Michael Moorman, Saint Leo University
Room: Edison

A Secure Network Architecture for the Internet of Things Based on Local Authorization Entities
  Hokeun Kim, Armin Wasicek, Benjamin Mehne and Edward A. Lee
Russian Model of Public Keys and Validation Infrastructure as Base of the Cloud Trust
  Melnikov Dmitriy Anatolievich, Durakovskiy Anatoliy Petrovich, Gorbatov Viknor Sergeevich, Ivanenko Vitaliy Grigorievich and Modestov Alexey Albertovich
Security Operations Centers for Information Security Incident Management
  Natalia Miloslavskaya
Policy Engine as a Service (PEaaS): An Approach to a Reliable Policy Management Framework in Cloud Computing Environments
  Faraz Fatemi Moghaddam, Philipp Wieder and Ramin Yahyapoor
Social Engineering Attack Strategies and Defence Approaches
  Ahmad Alhejailan, Ibrahim Ghafir and Mohammad Hammoudeh

MobiWis Session 3: Security of Mobile Applications

Session Chair: Ondrej Krejcar, University of Hradec Kralove
Room: Tesla

Adaptive Trust Scenarios for Mobile Security
  Serif Bahtiyar, Orhan Ermis and Mehmet Ufuk Caglayan
Access control approach in development of mobile applications
  Aneta Poniszewska-Maranda and Aneta Majchrzycka
Using mobile technology in national identity registration
  Thanh Van Do, Clark Swafford, Loc H. Khuong, Van Thuan Do and Boning Feng
Strengthening mobile network security using machine learning
  Van Thuan Do, Paal Engelstad, Boning Feng and Thanh Van Do
Secured Authentication Using Anonymity and Password-Based Key Derivation Function
  Mohd Izuan Mohd Saad, Kamarularifin Abd Jalil and Mazani Manaf

SNAMS Session 2: Social Media 2

Session Chair: Muhannad Quwaider, Jordan University of Science & Technology

Room: Watt

A Social Network Analysis of tweets during the Gaza War, Summer 2014
   Wael Al Sarraj, Ashraf Maghari, Mahmoud Abu-Ghosh and Khalid Kahloot
Using a Rich Context Model for Real-Time Big Data Analytics in Twitter
   Alisa Sotsenko, Marc Jansen, Marcelo Milrad and Juwel Rana
Social Networks Benchmark Dataset for Diseases Classification
   Muhannad Quwaider and Mosab Alfaqeeh
Using Dynamic 1 to Speed-Up Clustering-Based Community Detection In Social Networks
   Mohammed Alandoli, Mahmoud Al-Ayyoub, Yaser Jararweh and Mohammad Al-Smadi

17:00-18:30   Parallel Sessions

FiCloud Session 5: Software-defined Networking and Cloud

Session Chair: Samia Bouzefrane, INRIA, France
Room: Edison

   The Design of Traffic-aware Intelligent Control System on Software-Defined Cloud Networking
   Ji-Young Kwak, Chunglae Cho, SaeHoon Kang, YongYoon Shin, Soo-Myung Pahk
Flow Based Security for IoT Devices using an SDN Gateway
   Peter Bull, Ron Austin, Evgenii Popov, Mak Sharma and Richard Watson
SDCache: Software Defined Data Caching Control for Cloud Services
   Ala Darabseh, Nikolaos Freris, Yaser Jararweh and Mahmoud Al-Ayyoub
Towards Efficient Resource Management in Cloud Computing: A Survey
   Markus Ullrich, Joerg Laessig and Martin Gaedke
New Communicating Concrete for Data Storage and Retrieval through Integrated Micro Sensor Nodes
   Kais Mekki, William Derigent, Eric Rondeau and André Thomas

Session: SITA Workshop

Session Chair: Kai Jakobs, RWTH Aachen University
Room: Tesla

An investigation on the M2M/IoT trajectory and its relationship with formal standards
   Dong-hyu Kim & Heejin Lee

IoT standardization. The approach in the field of data protection as a model for ensuring compliance of IoT applications?

Kees Stuurman, U. Tilburg

Humans are Back in the Loop! Would Technology Related Ethics Support the Design, Operating and Standardization of Safe, Secure and Efficient Human-Machine-Collaboration?

Hartwig Steusloff, Fraunhofer IOSB

Standardisation of (Emerging) IoT-Applications: Past, Present and Glimpse into the Future

Kai Jakobs

SNAMS Session 3: Security, Data and Semantics

Session Chair: Rehab Duwairi, Jordan University of Science and Technology
Room: Watt

Exploring Research Networks with Data Science - A Data-Driven Microservice Architecture for Synergy Detection

Thomas Thiele, Thorsten Sommer, Sebastian Stiehm, Sabina Jeschke and Anja Richert

Microblogging Hash Tag Recommendation System Based on Semantic TF-IDF

Mir Saman Tajbakhsh and Jamshid Bagherzadeh

An Intelligent Model for Vulnerability Analysis of Social Media User

Firya Rashid Abubaker and Pinar Sarisaray Boluk

The Black Mark Beside My Name Server: Exploring the Importance of Name Server IP Addresses in Malware DNS Graphs

Jukka Ruohonen, Sanja Scepanovic, Sami Hyrynsalmi, Igor Mishkovski, Tuomas Aura and Ville Leppänen

| 19:30-21:30 | Reception Party |
| | (at Hotel Park Royal Palace - conference venue) |

TUESDAY 23 AUGUST 206

09:00-10:30	Plenary Session: Keynote II

Intelligent Systems for Healthy Cities
  Agnis Stibe, Massachusetts Institute of Technology, USA
Session Chair: Christine Strauss, University of Vienna
Room: Edison

10:30-11:00	Coffee Break

11:00-12:30	Parallel Sessions

FiCloud Session 6: Networking and Communication Protocols

Session Chair: Peter Bull, Birmingham City University
Room: Edison

Robust Uplink Resource allocation in LTE Networks With M2M Devices as an Infrastructure of Internet of Things
  Mohammad Reza Mardani, Salman Mohebi and Hossein Bobarshad
Hello-Based Link Failure Detection Analysis in Wireless Mesh Networks
  Tareq Hayajna and Michel Kadoch
Retransmission Schemes for Lossless Transparent Optical Packet Switching in Large-scale Datacentre Networks
  Jingyan Wang, Conor McArdle and Liam Barry
A Cluster-Based Life-Time Routing Protocol in VANET
  Ahmad Abuashour and Michel Kadoch

MobiWis Session 4: Mobile and Wireless Networking

Session Chair: Serif Bahtiyar, Boğaziçi University
Room: Tesla

Optimal Resource Allocation for Non-Real Time Visible Light Communication Networks
  Fabian Seguel, Pablo Adasme, Ismael Soto and Belarmino Núñez
On Information Sharing Scheme for Automatic Evacuation Guiding System Using Evacuees' Mobile Nodes
  Nobuhisa Komatsu, Masahiro Sasabe and Shoji Kasahara
Cognitive Downlink Interference LTE femtocell
  Nahla NurElmadina, Ibtehal Nafea, Nuha Bihary
Correlation Properties of QOCCC based on 1D-CCC with Parameters (N, N, 2N) and (N, N, N)
  Monika Dávideková and Michal Greguš Ml.

Heterogeneous Traffic Modeling and Analysis for Wireless Sensor Networks
  Hamida Ali and Sayeed Sayeed Ghani
DUCO: Hybrid Indoor Navigation
  Can Surmeli and Tacha Serif

OBD Session 1: Big and Open Data Systems

Session Chair: Zaher Al Aghbari, University of Sharjah

Room: Watt

Evaluating the Scaling of Graph-Algorithms for Big Data using GraphX
  Jakob Andersen and Olaf Zukunft
Mining Social Capital on Online Social Networks with Strong and Weak Ties
  Swapna Gokhale and Huda Alhazmi
Measures for assessing the data freshness in OpenData portals
  Sebastian Neumaier and Jürgen Umbrich
MedRec: Using Blockchain for Medical Data Access and Permission Management
  Asaph Azaria, Ariel Ekblaw, Thiago Vieira and Andrew Lippman
Mining Semantic Location History for Collaborative POI recommendation in Online Social Networks
  Luepol Pipanmaekaporn and Suwatchai Kamolsantiroj

12:30-13:30	Lunch

13.30-15:00	Parallel Sessions

FiCloud Session 7: Context-aware and Smart Environment

Session Chair: Fano Ramparany, Orange, France
Room: Edison

Towards a software framework for the autonomous internet of things
  Marco E. Perez Hernandez and Stephan Reiff-Marganiec
Exploiting Data Analytics for Home Automation Service
  Fano Ramparany, Marceau Thalgott and Sébastien Bolle
Survey: Toward A Smart Campus Using the Internet of Things
  Abdullah Alghamdi and Sachin Shetty
Improving the smart environment for control systems of earth-moving and construction machines
  Tatyana Golubeva, Evgeniy Zaytcev and Sergey Konshin
Mobile Multi-Agent Systems for the Internet-of-Things and Clouds using the JavaScript Agent Machine Platform and Machine Learning as a Service
  Stefan Bosse

MobiWis Session 5: Personalization and Social Networks

Session Chair: Natalia Kryvinska, University of Vienna
Room: Tesla

Impact of Individual Differences on the Use of Mobile Phones and Applications
Perin Ünal, Tuğba Taşkaya Temizel, and P. Erhan Eren
Smart Solution in Social Relationships Graphs
Ales Berger and Filip Maly
A Context-based Personalization for Mobile Applications' Network Access
Yaser Mowafi, Tareq Aqarbeh and Rami Azrai
Group assist recommendation model based on intelligent mobile terminals - GARMIT
Han Lansheng, Sun Changhua, Qian Mengxiao, Han Shuxia and Kwisaba Hamza
A Smart Arduino Alarm Clock Based on NREM and REM Sleep Stage Detection
Adam Drabek, Ondrej Krejcar, Kamil Kuca

OBD Session 2: Analysis and Classification of Big Data

Session Chair: Jürgen Umbrich, Vienna University of Economics & Business
Room: Watt

Cloud-based Data Analysis of User Side in Smart Grid
Yuanyuan Sun, Jingjing Yuan and Mingyue Zhai
Discovering Contrast Sets for Efficient Classification of Big Data
Zaher Al Aghbari and Imran Junejo
Utilizing big data analysis for diseases prevention and control during Hajj
Ibtehal Nafea
Measuring Fuzzy Atomicity for Composite Service Execution
Yudith Cardinale, Joyce El Haddad, Maude Manouvrier, Marta Rukoz

15:00-15:30	Coffee Break

15:30-17:00	Parallel Sessions

Session: ABA Workshop

Session Chair: Soraya Kouadri Mostéfaoui, The Open University
Room: Edison

Generational Garbage Collection Algorithm Based on Lifespan Prediction
Xin Ren, Xuying Zhang and Yuan Song
Spar(k)ql: SPARQL evaluation method on Spark GraphX
Gergő Gombos, Gábor Rácz and Attila Kiss

Data Modeling and Case-based Reasoning for Social Monitoring
    Hadi Hashem and Daniel Ranc

BigDataR&I Session 1: Big Data Research and Innovation 1

Session Chair: Muhammad Younas, Oxford Brookes University
Room: Tesla

Survey of Big Data Information Security
    Natalia Miloslavskaya and Aida Makhmudova.
Investigating metrics to build a benchmark tool for complex event processing systems
    André L. S. Gradvohl
Application of Big Data, Fast Data and Data Lake Concepts to Information Security Issues
    Natalia Miloslavskaya and Alexander Tolstoy

OBD Session 3: Big and Open Data Applications
Session Chair: Maude Manouvrier, Université Paris-Dauphine
Room: Watt

Characteristics of Open Data CSV Files
    Johann Mitlohner, Sebastian Neumaier,y Jurgen Umbrich, Axel Polleres
Open Data Portal, a Technical Enabler to Drive Innovation in Namibia
    Lameck Mbangula Amugongo, Shawulu Nggada and Jürgen Sieck
Managing and Storing Function Results in Temporal Approach
    Michal Kvet and Karol Matiasko
Towards a Reference Architecture for Trusted Data Marketplaces
    Dumitru Roman and Stefano Gatti
Software Application Logging: Aspects to Consider by Implementing Knowledge Management
    Monika Dávideková and Michal Greguš Ml

17:00-18:30	Parallel Sessions

Session: EMSICC Workshop

Session Chair: Samia Bouzefrane, INRIA, France
Room: Edison

Joint Resource Allocation Optimization in OFDM Relay Networks with SWIET
    Gaofei Huang
A New Scalable and Energy Efficient Algorithm for VMs Reassignment in Cloud Data Centers
    Makhlouf Hadji, Nabila Djenane, Rachida Aoudjit & Samia Bouzefrane

A Novel Authentication and Key Agreemtent Protocol for Internet of Things Based Resource constrained Body Area Sensors
  Muhammad A Iqbal, Magdy Bayoumi
Particle Swarm Optimization Scheduling for Energy Saving in Cluster Computing Heterogenous Environments
  Eloi Gabaldon Ponsa, Fernando Guirado, Josep Lluis Lerida, Jordi Planes
Energy efficiency in Mobile Cloud Computing Architectures
  Thinh Le Vinh, Reddy Pallavali, Fatiha Houacine & Samia Bouzefrane

BigDataR&I Session 2: Big Data Research and Innovation 2

Session Chair: Natalia Miloslavskaya, Moscow Engineering Physics Institute
Room: Tesla

Taxonomy for Unsecure Big Data Processing in Security Operations Centers
  Natalia Miloslavskaya, Alexander Tolstoy and Sergey Zapechnikov.
 Forecasting The Natural Gas Price Trend – Evaluation of a Sentiment Analysis
  Tina Grundmann, Carsten Felden and Marco Pospiech.
Rule- and Cost-Based Optimization of OLAP Workloads on Distributed RDBMS with Column-Oriented Storage Function
  Takamitau Shioi and Kenji Hatano.
Infrastructure-Aware Functional Testing of MapReduce programs
  Jesús Morán, Bibiano Rivas, Claudio De La Riva, Javier Tuya, Ismael Caballero and Manuel Serrano.
An incremental approach for real-time Big Data visual analytics
  Ignacio García Fernández, Rubén Casado and Hamid Bouchachia

ICI Session 1: Inter-Cloud and IoT

Session Chair: Irfan Awan, University of Bradford

Room: Watt

Multilayer virtualized systems analysis with kernel tracing
  Cedric Biancheri, Naser Ezzati and Michel Dagenais

A Coordination-based Brokerage Architecture for Multi-Cloud Resource Markets
  Claus Pahl

Legal and Regulative Aspects of IoT Cloud Systems
  Edua Eszter Kalmar, Attila Kertesz, Szilvia Varadi, Radhika Garg, Burkhard Stiller
MobIoTSim: Towards a Mobile IoT Device Simulator
  Tamas Pflanzner, Attila Kertesz, Bart Spinnewyn and Steven Latre

Using Block Cipher for Data Confidentiality in Cloud-based Systems
  Rana Rihan and Khaled Khan

| 20:00-22:00 | Dinner Party (at Hotel Park Royal Palace - conference venue) |

WEDNESDAY 24 AUGUST 2016

09:00-10:30	Parallel Sessions

FiCloud Session 8: Intelligent Systems for Cloud and Services Computing

Session Chair: Stephan Reiff-Marganiec, University of Leicester
Room: Edison

LOV4IoT: A second life for ontology-based domain knowledge to build Semantic Web of Things applications
  Amelie Gyrard, Christian Bonnet, Karima Boudaoud and Martin Serrano
Reusing and Unifying Background Knowledge for Internet of Things with LOV4IoT
  Amelie Gyrard, Ghislain Atemezing, Christian Bonnet, Karima Boudaoud and Martin Serrano
Learning Semantic Features from Web Services
  Mário Antunes, Diogo Gomes and Rui Aguiar
Cloud Job Access Control Scheme Based on Gaussian Process Regression and Reinforcement Learning
  Zhiping Peng and Delong Cui
Agent-Based Cloud Computing: A Survey
  Mohamed Galal Hafez and Mohamed Shaheen Elgamel

MobiWis Session 6: Mobile Web and Applications

Session Chair: Tor-Morten Grønli, Westerdals Oslo ACT
Room: Tesla

Shopping Furniture and Appliances with FAV Mobile Application
  Samia Loucif, Dena Ahmed, Reem Salem and Nasra Ali
A Measurement Tool to Track Drones Battery Consumption During Flights
  Luis Corral, Ilenia Fronza, Nabil El Ioini and Aristea Ibershimi
Speed Up Native Mobile Form Development
  Armin Engesser, Mike Groezinger and Ralf Schimkat
Location Based Services used in Smart Electronic Wallet Mobile Application
  Jan Kozlovsky, Jan Dvorak, Ondrej Krejcar
Smart Automatic Control of GSM Alarm
  Lukas Veselka, Jan Dvorak, Ondrej Krejcar

ICI Session 2: Mobile Cloud and Data

Session Chair: Fisnik Dalipi, Norwegian University of Science and Technology
Room: Watt
Power Optimization of Large Scale Mobile Cloud System using Cooperative Cloudlets
  Muneera Al-Quraan, Mahmoud Al-Ayyoub, Yaser Jararweh, Lo'Ai Tawalbeh and Elhadj Benkhelifa

Mobile Health (m-health) System in the context of IoT
Sultan Almotiri, Murtaza Khan and Mohammed Alghamdi
Inter-Domain Mobility Management using SDN For Residential/Enterprise Real Time Services
Walaa Farouk and Mikhail Mikhail
Evaluating NoSQL document oriented data model
Hadi Hashem and Daniel Ranc
Knowledge management as a service (KMaaS)
Peter Balco and Martina Drahošová

10:30-11:00	Coffee Break

11:00-12:30	Parallel Sessions

FiCloud Session 9: IoT Services and Applications

Session Chair: Sylvain Kubler, University of Luxembourg
Room: Edison II

Choosing your IoT Programming Framework: Architectural Aspects
Leila Fatmasari Rahman, Tanir Ozcelebi and Johan J. Lukkien
Micro-billing framework for IoT: Research & Technological foundations
Jérémy Robert, Sylvain Kubler and Yves Le Traon
Thing as a Service Interoperability: Review and Framework Proposal
Darko Andročec and Neven Vrček
HINC – Harmonizing Diverse Resource Information Across IoT, Network Functions and Clouds
Duc Hung Le, Nanjangud Narendra and Hong-Linh Truong
Information Retrieval as a Service for the Web of Things: A Survey and a Proposal of IRaaS Architecture
Cristyan Manta Caro and Juan M. Fernández-Luna

MobiWis Session 7: Mobile Applications and Wearable Devices

Session Chair: Aneta Poniszewska-Maranda, Lodz University
Room: Tesla

Persuasive Cities for Sustainable Wellbeing: Quantified Communities
Agnis Stibe and Kent Larson
H-Plane: Intelligent Data Management for Mobile Healthcare Applications
Rahul Krishnan Pathinarupothi, Bithin Alangot, Maneesha Vinodini Ramesh, Krishnashree Achuthan and P. Venkat Rangan
Mobile Health Devices for Aging Population Groups: A Review Study
Blanka Klimova
Sensors in your Clothes: Design and Development of a Prototype
Kristine Lorentzen, Tor-Morten Grønli, Gheorghita Ghinea, Muhammad Younas

Utilizing Multiple Interaction Styles to Collect Installed Base Information Using Wearable and Mobile Devices
    Markus Aleksy and Nicolaie Fantana

ICI Session 3: Security and Privacy

Session Chair: Attila Kertesz, University of Szeged

Room: Edison III
Security and Privacy Considerations for IoT Application on Smart Grids: Survey and Research Challenges
    Fisnik Dalipi and Sule Yildirim Yayilgan
Cyber-Attack Modeling Analysis Techniques: An Overview
    Hamad Al-Mohannadi, Qublai Mirza, Anitta Patience Namanya, Irfan Awan, Andrea Cullen and Jules Disso
A Survey on Network Security Monitoring Systems
    Ibrahim Ghafir, Mohammad Hammoudeh, Jakub Svoboda and Vaclav Prenosil
State-Level Views on Professional Competencies in the Field of IoT and Cloud Information Security
    Natalia Miloslavskaya and Alexander Tolstoy
Provable Secure Pairing-free Certificate-less Authenticated Key Agreement Protocol
    Amr Farouk and Mohamed Fouad

ICI Session 4: Cloud and Networking

Session Chair: Hari Kumar Nagabushanam, Ericsson, India
Room: Watt

Dual Backhaul Links in Mobile Relay in LTEAdvanced Systems For Public Trnsportation Vehicles.
    Khaled Addali, Abderrahmane Benmimoune, Michel Kadoch, Fawaz Khasawneh and Amamer Saied
Distributed Interference Alignment in Partially Connected Networks Without Preliminary Topological Knowledge
    Peter Farkaš, Matej Staroň and Frank Schindler
Virtual Machines' Load-Balancing in Inter-Clouds
    Mohamed Riduan Abid, Karima Kaddouri, Moulay Driss El Ouadghiri, Kevin Smith and Michael Gerndt
A Container-based Edge Cloud PaaS Architecture based on Raspberry Pi Clusters
    Claus Pahl, Sven Helmer, Lorenzo Miori and Julian Sanin
An Autonomous Aquaponics System using 6LoWPAN based WSN
Hari Kumar Nagabushanam, Sanjana Hariraj and Vaishali Krishnan

12:30-13:30	Lunch

FiCloud Session 10: Cloud and IoT Systems

Session Chair: Stefan Bosse, University of Bremen
Room: Edison II

Effective Live Cloud Migration
  Ibrahim Ejdayid A Mansour, Kendra Cooper and Hamid Bouchachia
DevOps for IoT Applications using Cellular Networks and Cloud
  Athanasios Karapantelakis, Hongxin Liang, Keven Wang, Rafia Inam, Elena Fersman, Ignacio Mulas-Viela, Nicolas Seyvet, Vasileios Giannokostas and Konstantinos Vandikas
Inter Ecosystem Interoperability on Cloud Survey to Solution
  Abdul Razzaq, Muhammad Asif and Hafiz Usman Zia
A Generic Digital Forensic Investigation Framework for Internet of Things
  Victor Kebande and Indrakshi Ray
Optimising Fault Tolerance in Real-time Cloud Computing IaaS Environment
  Bashir Mohammed, Mariam Kiran, Irfan-Ullah Awan and Kabiru M. Maiyama

FiCloud Session 11: Data, Knowledge Management and Monitoring

Session Chair: Eric Rondeau, University of Lorraine
Room: Edison III

Improving Bitmap Execution Performance Using Column-Based Metadata
  Miguel Velez, Jason Sawin, Alexia Ingerson and David Chiu
Key Dimensions for Cloud mauData Governance
  Majid Al-Ruithe, Elhadj Benkhelifa and Khawar Hameed
Semantic model for IoT-enabled electric vehicle services: Puzzling with ontologies
  Min-Jung Yoo, Prodromos Kolyvakis, Dimitris Kiritsis, Dirk Werthmann and Robert Hellbach
Using ICT Energy consumption for monitoring ICT usage in an enterprise
  Dimitar Minovski, Eric Rondeau and Jean-Philipp Georges
Environment Monitoring in Smart Cities using Virtual Sensors
  Sunanda Bose and Nandini Mukherjee

Session: MobiApps Workshop

Session Chair: Samia Loucif, ALHOSN University
Room: Tesla

Malware Development on Mobile Environments
  Gianluca Papaleo, Enrico Cambiaso,Luca Patti, Maurizio Aiello

Application for the Detection of Dangerous Driving and an Associated Gamification Framework

    Keshav Bahadoor, Patrick Hosein

ROBODEM mobile Application for Real time video streaming of Robotic System

    Tasneem Yousif, Aysha Alharam

Smart Mobile-based Emergency Management and Notification System

    Mohammed Ghazal, Samr Samir Ali, Marah Alhalabi, Nada Ali, Yasmina Al Khalil

Towards Secure Mobile Process Tracking using Wearable Computing in mGovernment Applications

    Yasmina Al Khalil, Fasila Haneefa, Assem Marwan Mhanna, Dana H. Awachi, Samr Samir Ali

A Mobile Cloud System for Different Useful Applications

    Lo'ai A. Tawalbeh, Waseem Bakheder

Session: PMECT and AWMA Symposia

Session Chair: Peter Bull, Birmingham City University

Room: Watt

On the Performance of Tabu Search Algorithm for the Vehicle Routing Problem with time windows

    Pinar Kirci

Authentication and Key Management in A LTE-based Control and Non-payload Communication Network

    Gicheol Wang, Byungsun Lee and Jaeyeong Ahn

Optimised QoS-aware DBA mechanisms in XG-PON for upstream traffic in LTE Backhaul

    Jerome A. Arokkiam, Cormac J. Sreenan and Kenneth N. Brown

Sizing Network Buffers: A HTTP Adaptive Streaming Perspective

    Darijo Raca, Ahmed Zahran and Cormac Sreenan